MOUNT RAINIER ROADS & BRIDGES

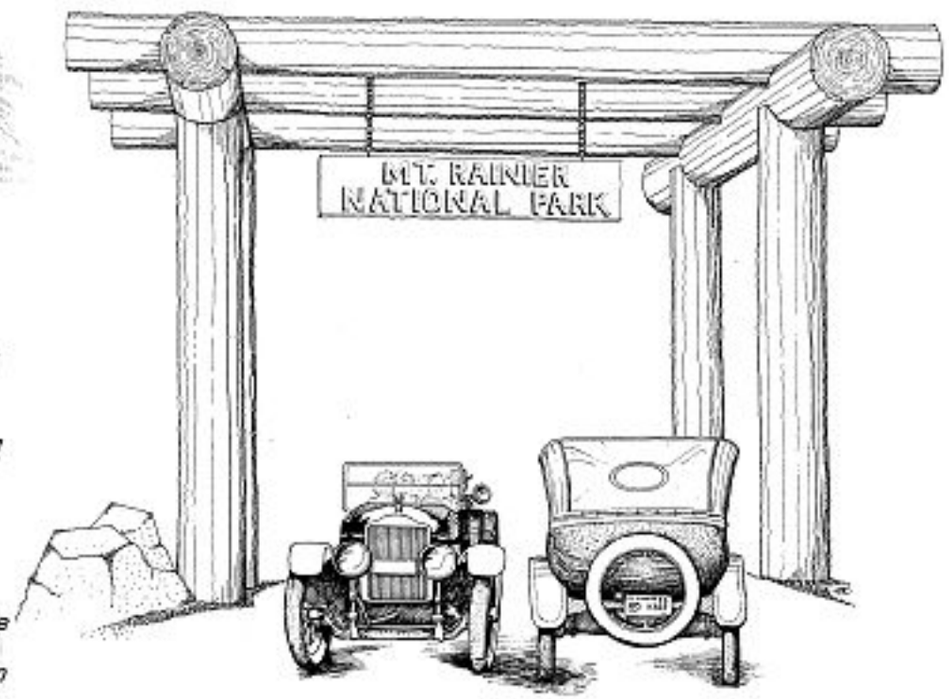
MOUNT RAINIER NATIONAL PARK, WASHINGTON

Design with the Land

Mount Rainier is a dormant volcano rising to 14,410 feet above sea level, the top of which is covered with perpetual snow. Besides the mountain itself, the national park contains many features of scenic and scientific interest; including living glaciers, waterfalls, lakes, canyons, old-growth forests and subalpine meadows.

Mount Rainier National Park was established on March 2, 1899, contemporanious with the rise of the automobile and the desire to experience America's natural wonders. During the early national park years, pre-1916, the U.S. Army Corps of Engineers designed the park roads and bridges to harmonize with the superb scenery. Following the creation of the National Park Service in 1916, NPS engineers and landscape architects worked together to continue this tradition. Design and construction of park roads was transferred to the Bureau of Public Roads in 1925.

Between 1920 and 1940 the "Rustic Style" of architecture became the standard of design for park construction. Native stone, logs and other indigenous materials were commonly used for buildings, bridges, retaining walls, and signage. During this period, natural planting practices became the standard for revegetation work. Some of this work was carried out by the Emergency Conservation Works program, the parent organization of the Civilian Conservation Corps, a massive public works project that provided relief for many unemployed men during the Depression.



This project is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. The HAER program is administered by the Historic American Buildings Survey/Historic American Engineering Record Division (HABS/HAER) of the National Park Service, U.S. Department of the Interior. The Mount Rainier Roads and Bridges Recording Project was cosponsored during the summer of 1992 by HAER under the general direction of Dr. Robert J. Kapsch, Chief, the National Park Service Roads and Bridges Program, John Gingles, Manager; and by Mount Rainier National Park, William Briggle, Superintendent.

The field work, measured drawings, historical reports, and photographs were prepared under the direction of Project Leader Eric N. DeLony, Chief of HAER. The recording team consisted of Todd A. Croteau, team supervisor; architectural technicians Bryan D. Fish and Daniela Treffel (U.S./ICOMOS, Argentina); and landscape architect Julie Ann Dickson. Historical reports were prepared by project historian Richard H. Quin. Formal large-format photography was done by Jet Lowe, HAER staff photographer.

Nisqually Entrance Gate, based on historic photograph

The landscape work related to the roads and bridges of Mount Rainier National Park maintains a sensitivity to the natural features of the land. Most built components were designed so they integrated into the system as a whole, in harmony with the natural landscapes of the mountain region. Planned to preserve the natural beauty of the park, Mount Rainier's roads and bridges provide safe and convenient access for millions of visitors. Without them, the national park experience would be markedly different from today.

Bridges of various construction have spanned Mount Rainier's major streams and lesser tributaries, many of which have been washed away by glacial mud flows or replaced due to decay in the harsh environment. The first bridges were constructed of logs or rough-hewn timber; only the Nisqually River Suspension Bridge remains. Many of the park bridges appear to be constructed of stone masonry. Actually, these arch bridges are built of concrete and merely faced in stone, characteristic of the NPS Rustic Style. Several exposed-concrete structures exist and an unusual three-hinged steel web-arch spans Fryingpan Creek. Even smaller bridges and culverts were designed to blend with the rugged mountain scenery. Most of the park bridges are constructed on tangents or curves, frequently superelevated or banked, offering a smooth transition from road to span. Such designs help the park roads sweep gracefully through the spectacular terrain.

HISTORIC AMERICAN ENGINEERING RECORD
WA-35

SHEET 1 of 2

MOUNT RAINIER ROADS AND BRIDGES
PIERCE/LEWIS COUNTIES
WASHINGTON

MOUNT RAINIER NATIONAL PARK

DELINEATED BY: Daniela Treffel, Todd A. Croteau, 1992

MOUNT RAINIER ROADS AND BRIDGES RECORDING PROJECT
NATIONAL PARK SERVICE
HISTORIC AMERICAN ENGINEERING RECORD